US threat to Indian scientific institutions

582. SHRI SOLIPETA RAMACHANDRA REDDY: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether it is a fact that India's premier research institutions, the Indian Institute of Sciences, as well as a number of public and private sector companies have been threatened by USA to be put on a watch list.

(b) if so, the reasons therefor; and

(c) the reaction of Government thereto?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI YOGINDER K. ALAGH): (a) to (c) The Indian Institute of Science is not among the Indian organisations notified under US domestic legislation for export control regulations. However, the US Department of Commerce has notified Bharat Electronics Limited (BEL), Bhabha Atomic Research Centre (BARC), Indira Gandhi Centre for Atomic Research (IGCAR) and Indian Rare Earth Limited (IREL).

Whenever curbs on export of some materials are brought about, Government takes up the matter with the concerned authorities and also meets the challenge by building up its own technological capabilities.

Amount spent on research and development

583. SHRI BRATIN SENGUPTA: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether it is a fact that India spends less than one percent of its GNP on R&D and even this percentage is declining steadily in the nineties from 0.93 in 1989-90 to 0.80 in 1995-96.

(b) What is India's position as far as R&D is concerned, among develdping countries; and

(c) whether India can progress given this meagre R&D expenditure?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI YOGINDER K. ALAGH): (a) to (c) Official Statistics of Expenditure on Research and Development (R&D) are estimated from the R&D Expenditures of the Central and State Governments', R&D institutions and in-house R&D units of Private Sector and Scientific Industrial Research Organisations (SIRO) recognised by the Department of Scientific and Industrial Research (DSIR). According to this compilation, the expenditure on R&D as percentage of Gross National Product (GNP) has hovered around 0.8% during the nineties. This compilation does not take into account the expenditure that may be incurred by other entities, including businesses and Companies which have not applied for recognition by DSIR.

According to UNESCO sources expenditure on R&D in selected countries as percentage of GNP is as follows:

Country	Reference Year Exp. of	R&D as % GNP
Argentina	1988	0.3
Brazil	1985	0.4
China	1992	0.5
Egypt	1991	1.0
Indonesia	1988	0.2
Republic of Korea	1992	2.1
Pakistan	1990	0.9
Philippines	1984	0.1
Singapore	1987	0.9

The investments made by Central and State Governments on R&D has been on